

## CLAIMS

1           1.     A lockout valve comprising:  
2                 a valve body having a housing with an inlet conduit at one end of a  
3                 central chamber and an outlet conduit at an other end of said central chamber,  
4                 such that said inlet conduit, central chamber and outlet conduit form a  
5                 continuous passageway, and a valve slide channel extending transversely  
6                 therethrough said housing between an upper opening in an upper end of said  
7                 housing and a lower opening in a lower end of said housing;  
8                 a slide mechanism slidingly disposed in said valve slide channel to  
9                 operatively control fluid flow through said passageway between an open  
10                position, an intermediate position and a closed position, wherein said slide  
11                mechanism is generally planar and includes an upper end and a lower end each  
12                having a radially extending flange and two side edges extending therebetween  
13                said upper end and said lower end, and having a front side facing toward said  
14                inlet conduit and a back side facing toward said outlet conduit, and a plurality  
15                of flow apertures extending therethrough said slide mechanism and arranged in  
16                a predetermined pattern to restrict flow through said passageway in an  
17                intermediate position;  
18                wherein said front side of said slide mechanism includes a detent slot  
19                having a predetermined length, width and depth, and said back side of said  
20                slide mechanism includes a longitudinally extending override slot having an  
21                upper portion with a first predetermined length, width and depth positioned  
22                opposite said detent slot to form a continuous opening through said slide

23 mechanism, and having a lower portion with a second predetermined length,  
24 width and depth extending partially therethrough said slide mechanism; and  
25 a detent mechanism for overriding the intermediate position of said  
26 slide mechanism including a detent override lever partially disposed in said  
27 housing with a finger member extending from an edge of said detent override  
28 lever within said housing, a spring member located in a recess in said housing  
29 and a ball member located in the housing recess, such that the ball member is  
30 positioned between the spring and the detent override lever, wherein said ball is  
31 located in an upper portion of said detent slot when said slide mechanism is in  
32 a closed position and travels through said detent slot concurrent with said slide  
33 mechanism sliding through the valve slide channel until said ball reaches a  
34 bottom edge of the detent slot and actuation of said detent override lever  
35 engages said override finger within the lower end of said override slot to push  
36 said ball into the recessed area of said housing so that said slide mechanism  
37 bypasses the intermediate position.

1 2. The lockout valve of claim 1 wherein said inlet conduit and said  
2 outlet conduit each include a connecting means disposed on an outer end.

1 3. The lockout valve of claim 1 wherein said inlet conduit and said  
2 outlet conduit each include a sealing means operatively disposed on an inner  
3 end, respectively.

1           4.     The lockout valve of claim 3 wherein said sealing means is an  
2     o-ring disposed in an annular channel formed in an inside surface of said  
3     housing about an inner end of said inlet conduit and an o-ring disposed in an  
4     annular channel formed in an inside surface of said housing about an inner end  
5     of said outlet conduit.

1           5.     The lockout valve of claim 1 wherein said slide mechanism  
2     includes indicia on a front side or a back side of said slide mechanism  
3     indicating either one of an open position or a closed position of said valve.

1           6.     The lockout valve of claim 1 wherein said slide mechanism  
2     includes a lockout aperture for preventing movement of said slide mechanism  
3     within said valve slide channel.

1           7.     The lockout valve of claim 1 wherein said slide mechanism  
2     detent slot is centrally positioned between said upper end and said lower end,  
3     and adjacent a side edge, of said slide mechanism.

1           8.     The lockout valve of claim 1 wherein an upper end of said back  
2     side of said slide mechanism includes a longitudinally extending exhaust slot  
3     having a predetermined length, width and depth that is adjacent a vent  
4     passageway in said valve housing when said slide mechanism is in a closed  
5     position.

1           9.     The lockout valve of claim 1 wherein said detent ball slidingly  
2 travels from a lower end of said detent slot to an upper end of said detent slot as  
3 said slide mechanism slides through said valve slide channel between the open  
4 and closed position to stop fluid flow through the passageway.

1           10.    The lockout valve of claim 1 wherein said detent ball slidingly  
2 travels through said detent slot until reaching an edge of the detent slot as said  
3 slide mechanism slides through said valve slide channel between either one of  
4 the open position or the closed position and the intermediate position, to restrict  
5 fluid flow through the passageway.

1           11.    The lockout valve of claim 1 wherein said valve body includes  
2 two housing members joined together using a fastening means.

1           12.    A lockout valve comprising:  
2           a valve body having a housing with an inlet conduit at one end of a  
3 central chamber and an outlet conduit at an other end of said central chamber,  
4 such that said inlet conduit, central chamber and outlet conduit form a  
5 continuous passageway, wherein said inlet conduit and said outlet conduit each  
6 include a sealing means operatively disposed on an inner end respectively and  
7 said inlet conduit and said outlet conduit each include a connecting means  
8 disposed on an outer end respectively;

9           a valve slide channel within said housing and extending transversely  
10 therethrough said housing between an upper opening in an upper end of said  
11 housing and a lower opening in a lower end of said housing;

12           a slide mechanism slidably disposed in said valve slide channel to  
13 operatively control fluid flow through said passageway between an open  
14 position, an intermediate position and a closed position, wherein said slide  
15 mechanism is generally planar and includes an upper end and a lower end each  
16 having a radially extending flange and two side edges extending therebetween  
17 said upper end and said lower end, and having a front side facing toward said  
18 inlet conduit and a back side facing toward said outlet conduit, and a plurality  
19 of flow apertures extending therethrough said slide mechanism and arranged in  
20 a predetermined pattern to restrict flow through said passageway in an  
21 intermediate position;

22           wherein said front side of said slide mechanism includes a detent slot  
23 having a predetermined length, width and depth and said back side of said slide  
24 mechanism includes a longitudinally extending override slot having an upper  
25 portion with a first predetermined length, width and depth positioned opposite  
26 said detent slot to form a continuous opening through said slide mechanism,  
27 and having a lower portion with a second predetermined length, width and  
28 depth extending partially through said slide mechanism; and

29           a detent mechanism for overriding the intermediate position of said  
30 slide mechanism including a detent override lever partially disposed in said  
31 housing with a finger member extending from an edge of said detent override

32 lever within said housing, a spring member located in a recess in said housing  
33 and a ball member located in the housing recess, such that the ball member is  
34 positioned between the spring and the detent override lever, wherein said ball is  
35 located in an upper portion of said detent slot when said slide mechanism is in  
36 a closed position and travels through said detent slot concurrent with said slide  
37 mechanism sliding through the valve slide channel until said ball reaches a  
38 bottom edge of the detent slot, and actuation of said detent override lever  
39 engages said override finger within the lower end of said override slot to push  
40 said ball into the recessed area of the housing so that said slide mechanism  
41 bypasses the intermediate position and said detent ball slidingly travels from a  
42 lower end of said detent slot to an upper end of said detent slot as said slide  
43 mechanism slides through said valve slide channel between the open position  
44 and the closed position.

1 13. The lockout valve of claim 12 wherein said sealing means is an  
2 o-ring disposed in an annular channel formed in an inside surface of said  
3 housing about an inner end of said inlet conduit and an o-ring disposed in an  
4 annular channel formed in an inside surface of said housing about an inner end  
5 of said outlet conduit.

1 14. The lockout valve of claim 1 wherein said slide mechanism  
2 includes indicia on a front side or a back side of said slide channel indicating  
3 either one of an open position or a closed position of said valve.

1           15.    The lockout valve of claim 12 wherein said slide mechanism  
2 includes a lockout aperture for preventing movement of said slide mechanism  
3 within said slide channel.

1           16.    The lockout valve of claim 12 wherein said slide mechanism  
2 detent slot is centrally positioned between said upper end and said lower end,  
3 and adjacent a side edge, of said slide mechanism.

1           17.    The lockout valve of claim 12 wherein an upper end of said  
2 back side of said slide mechanism includes a longitudinally extending exhaust  
3 slot having a predetermined length, width and depth that is adjacent a vent  
4 passageway in said valve housing when said slide mechanism is in a closed  
5 position.

1           18.    The lockout valve of claim 12 wherein said detent ball slidingly  
2 travels through said detent slot until reaching an edge of the detent slot as said  
3 slide mechanism slides through said valve slide channel between either one of  
4 the open position or the closed position and the intermediate position, to restrict  
5 fluid flow through the passageway.

1           19.    The lockout valve of claim 12 wherein said valve body includes  
2 two housing members joined together using a fastening means.

1           20.    A lockout valve comprising:  
2                a valve body having a housing with an inlet conduit at one end of a  
3                central chamber and an outlet conduit at an other end of said central chamber,  
4                such that said inlet conduit, central chamber and outlet conduit form a  
5                continuous passageway, wherein said inlet conduit and said outlet conduit each  
6                include a sealing means operatively disposed on an inner end respectively and  
7                said inlet conduit and said outlet conduit each include a connecting means  
8                disposed on an outer end respectively;  
9                a valve slide channel within said housing and extending transversely  
10               therethrough said housing between an upper opening in an upper end of said  
11               housing and a lower opening in a lower end of said housing;  
12               a slide mechanism slidably disposed in said valve slide channel to  
13               operatively control fluid flow through said passageway between an open  
14               position, an intermediate position and a closed position, wherein said slide  
15               mechanism is generally planar and includes an upper end and a lower end each  
16               having a radially extending flange and two side edges extending therebetween  
17               said upper end and said lower end, and having a front side facing toward said  
18               inlet conduit and a back side facing toward said outlet conduit and a plurality of  
19               flow apertures extending therethrough said slide mechanism and arranged in a  
20               predetermined pattern to restrict flow through said passageway in an  
21               intermediate position, and a lockout aperture for preventing movement of said  
22               slide mechanism within said valve slide channel;



23           indicia on a front side or a back side of said slide mechanism indicating  
24           either one of an open position or a closed position of the valve;

25           wherein said front side of said slide mechanism includes a detent slot  
26           having a predetermined length, width and depth and said back side of said slide  
27           mechanism includes a longitudinally extending override slot having an upper  
28           portion with a first predetermined length, width and depth positioned opposite  
29           said detent slot to form a continuous opening through said slide mechanism,  
30           and having a lower portion with a second predetermined length, width and  
31           depth extending partially through said slide mechanism; and

32           a detent mechanism for overriding the intermediate position of said  
33           slide mechanism including a detent override lever partially disposed in said  
34           housing with a finger member extending from an edge of said detent override  
35           lever within said housing, a spring member located in a recess in said housing  
36           and a ball member located in the housing recess, such that the ball member is  
37           positioned between the spring and the detent override finger, wherein said ball  
38           is located in an upper portion of said detent slot when said slide mechanism is  
39           in a closed position and travels through said detent slot concurrent with said  
40           slide mechanism sliding through the valve slide channel until said ball reaches  
41           a bottom edge of the detent slot, and actuation of said detent override lever  
42           engages said override finger within the lower end of said override slot to push  
43           said ball into the recessed area of the housing so that said slide mechanism  
44           bypasses the intermediate position and said detent ball slidingly travels from a  
45           lower end of said detent slot to an upper end of said detent slot as said slide

46 mechanism slides through said valve slide channel between the open position  
47 and the closed position to stop fluid flow through the passageway and said  
48 detent ball slidably travels through said detent slot until reaching an edge of  
49 the detent slot as said slide mechanism slides through said valve slide channel  
50 between either one of the open position or the closed position and the  
51 intermediate position, to restrict fluid flow through the passageway.

1           21.    The lockout valve of claim 20 wherein said sealing means is an  
2 o-ring disposed in an annular channel formed in an inside surface of said  
3 housing about an inner end of said inlet conduit and an o-ring disposed in an  
4 annular channel formed in an inside surface of said housing about an inner end  
5 of said outlet conduit.

1           22.    The lockout valve of claim 21 wherein said slide mechanism  
2 detent slot is centrally positioned between said upper end and said lower end,  
3 and adjacent a side edge, of said slide mechanism.

1           23.    The lockout valve of claim 21 wherein an upper end of said  
2 back side of said slide mechanism includes a longitudinally extending exhaust  
3 slot having a predetermined length, width and depth that is adjacent a vent  
4 passageway in said valve housing when said slide mechanism is in a closed  
5 position.

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- 1           24.     The lockout valve of claim 21 wherein said valve body includes
- 2     two housing members joined together using a fastening means.